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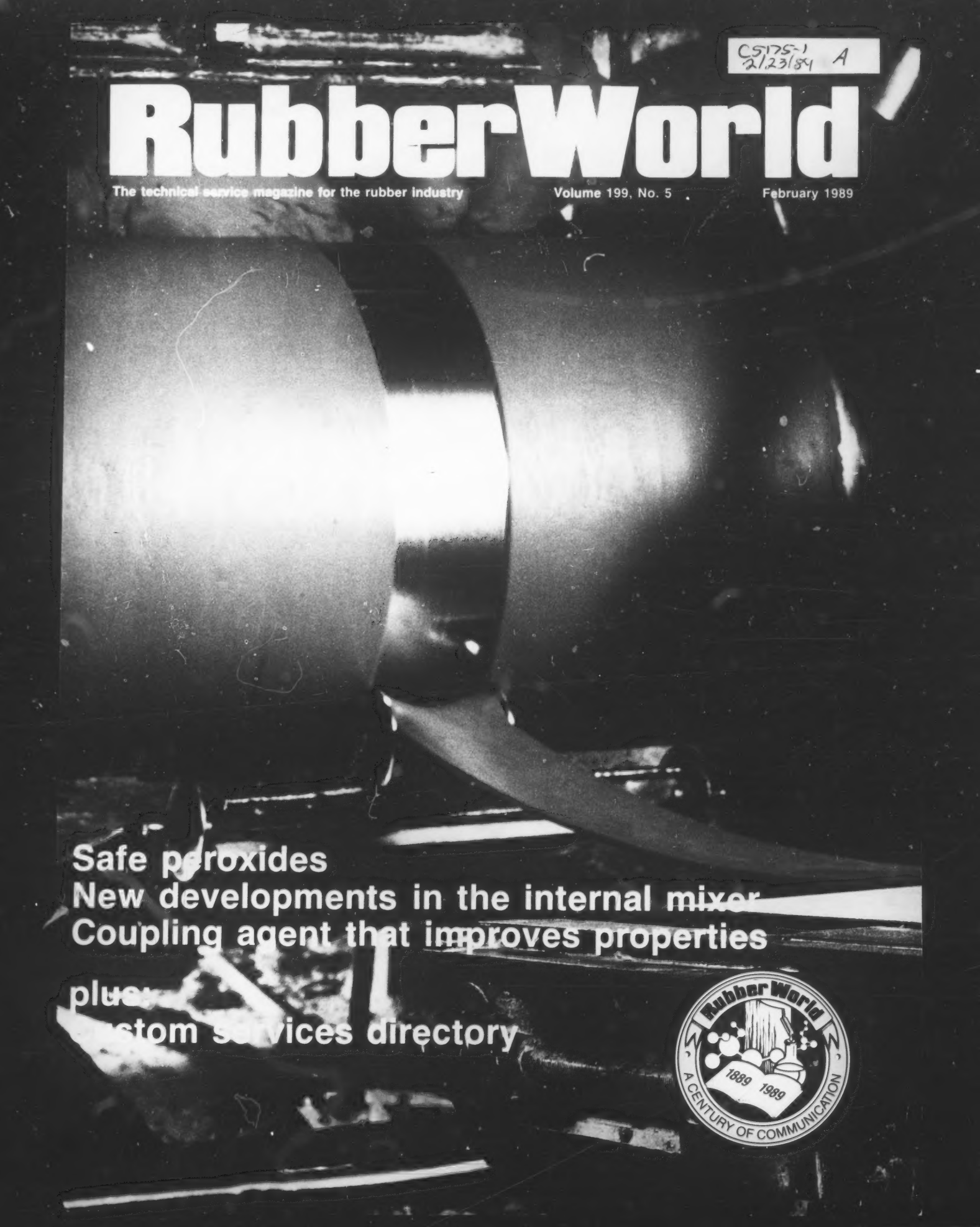
RubberWorld

The technical service magazine for the rubber industry

Volume 199, No. 5 February 1989



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New developments in the internal mixer
Coupling agent that improves properties

plus

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Rubber World
1889 1989
A CENTURY OF COMMUNICATION

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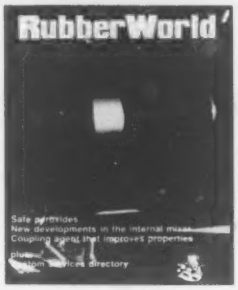

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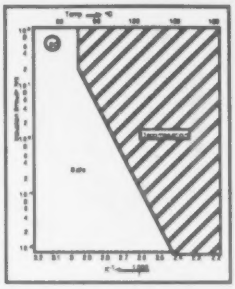

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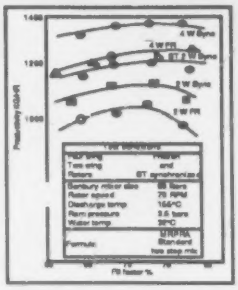

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Cover

Cover photo courtesy of M.A. Hanna Company

A Lippincott & Peto Publication

Editorial

In seven months this magazine will celebrate its 100th anniversary. Our October 1989 issue of *Rubber World*, the 1201st issue of what began as *India Rubber World and Electrical Trades Review*, will start its second century of publishing. In one of the first business streamlinings, the "and Electrical Trades Review" was dropped in 1900. "India" left the masthead in 1954. No further streamlining of the logo is planned, although our vendors call us RW.

The 1201st issue has been in the planning stages for some time.100th anniversaries are rare, in publishing or any business. Since we haven't found any other magazine's 100th anniversary issue, we're basically breaking new ground. We don't think you should just put out another October issue and call it your 100th anniversary issue.

Part of the planning involves researching the early issues. Reading about the infancy of the rubber industry is entertaining. Technically speaking, the rubber industry today bears little resemblance to the industry in 1889. The evolution is phenomenal. Cautchouc and Gutta Percha compared to TPEs and FKMs.

Publishing however is quite similar. Sure the technology of publishing has changed drastically, but the content of the magazines is fairly similar in scope. The tradition of publishing current technical material to assist the rubber processor and manufacturer has been retained throughout the years.

But the first editor, Henry Pierson, had more obstacles facing him. In an editorial commemorating the third year of publication, Pierson wrote of the start-up of the magazine. He printed: "At the time it was launched... it was a surprise to discover how few persons realized the importance and extent of the business. People generally regarded it as an unimportant little industry, which was confined chiefly to the manufacture of patented specialties, toys, some rubber-lined clothing and principally rubber boots and shoes. There was no source of authority, no definite information that could be obtained anywhere, and rubber manufacturers wore such a cloak of silence and mystery about their business that mankind at large was disposed to regard every rubber factory as something in the nature of an infernal machine which was liable to blow-up and wreck the community at any moment."

I know it makes our job of providing information easier by not having to worry about overcoming such a negative image of the industry. And the fact that your reading this proves that Pierson and those succeeding him had a hand in reversing that image.

Don R. Smith
Editor

RubberWorld

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- Product News
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Business Briefs

Acquisitions, expansions

Firestone Synthetic Rubber & Latex will increase capacity at its Lake Charles, LA, synthetic rubber plant, and install special polymerization facilities in a $22 million project expected to be completed in early 1990. Expansion will allow for the production of solution styrene butadiene rubber polymers, and involves the installation of an additional polymerization line and streamlining the packaging area in the Lake Charles plant. Capacity of solution synthetic rubber will increase about 12 percent with the planned expansion.

Firestone Industrial Products has reached a tentative agreement to acquire a factory in Williamsburg, KY, for production of air springs for use in the transportation and manufacturing industries.

General Tire is implementing a five-year, $159 million capital investment project that will double radial tire production, and convert current bias technology to radial passenger and light truck tire technology at its Barrie, Ontario, Canada manufacturing facility. Approximately 9,000 tires now are produced daily at the plant.

Johnson Controls has entered into a definitive agreement to purchase interest in **E.A.H. Naue GmbH & Co. KG**, a manufacturer of foam seating, plastic and other components. Naue, headquartered in Espelkamp, West Germany, owns or has equity in companies in West Germany, Austria, England, Yugoslavia, Mexico and Spain. The agreement is subject to approval by the German Cartel Office.

The **Goodyear** and **Pacific Dunlop Ltd.** joint venture, **South Pacific Tyres** will construct a $69 million

RMA rubber report through October
(figures in metric tons)

	YTD 1988	YTD 1987	% chg.
Total new rubber			
New rubber available	2,848,031	2,704,783	5.3
Imports	913,792	900,431	1.5
Exports	479,734	414,854	15.6
Apparent consumption	2,354,034	2,321,489	1.4
Total natural rubber			
Imports	701,692	666,581	5.3
Exports	42,108	29,782	41.4
Apparent consumption	675,174	645,815	4.6
Total synthetic rubber			
Production	1,934,239	1,806,352	7.2
Imports	212,100	233,850	-9.3
Exports	437,626	385,072	13.6
Apparent consumption	1,678,854	1,675,668	.2
Total SBR			
Production	750,465	699,463	7.3
Imports	75,510	67,959	11.1
Exports	161,498	142,130	13.6
Apparent consumption	641,889	646,261	-.7
Total nitrile			
Production	62,857	56,087	12.1
Imports	13,984	13,086	6.9
Exports	12,952	11,126	16.4
Apparent consumption	63,215	56,007	12.9
Polybutadiene			
Production	337,097	306,063	10.1
Imports	65,133	68,466	-4.9
Exports	54,330	51,036	6.4
Apparent consumption	338,396	328,061	3.2
Ethylene-propylene			
Production	221,773	210,775	5.2
Imports	10,933	5,517	98.2
Exports	42,522	38,557	10.3
Apparent consumption	191,232	172,701	10.7
Butyl, polychloroprene, polyisoprene, silicone and other synthetic elastomers			
Production	562,045	531,964	5.6
Imports	46,540	78,822	-41.0
Exports	166,324	142,223	17.0
Apparent consumption	444,120	472,643	-6.0

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Business Briefs

Lydall Elastomers has completed its name change to **Acadia Polymers, Inc.**

Parker Hannifin reported net income of $25.2 million on sales of $613 million for the second quarter of fiscal 1989, ended December 31.

PPG Industries reported fourth quarter net earnings of $102.3 million on sales of $1.4 billion.

Standard Products announced net income was $7.2 million on sales of $131.4 million for the second quarter of its 1989 fiscal year.

Markets, news

The **International Institute of Synthetic Rubber Producers** predicts that worldwide synthetic rubber consumption should reach over 11.5 million metric tons by 1993, according to its long-term worldwide rubber forecast. W.E. Tessmer, managing director of the Institute says total new rubber consumption, including natural rubber, should increase by an average yearly rate of 2% from the 1989 forecast level of 15.6 million metric tons to 17.2 million metric tons in 1993.

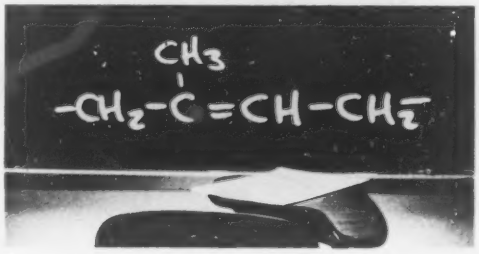
Styrene butadiene rubber consumption, which comprised the largest share of the synthetic rubber market at 34.9% in 1988, will be limited to an increase of 234 thousand metric tons between 1989 and 1993. Carboxylated latex consumption, with 15.4% of the synthetic rubber market, and polybutadiene consumption, with 16.1% of the market, are predicted to remain at that level for the next five years. EPDM consumption projections show the strongest growth with an increase of 18.9% over the 1989 outlook to 642 million metric tons predicted for 1993.

According to the forecast, tire and tire products continue to be the primary end-use category for synthetic rubber, with 42% of the world's synthetic rubber being used in that category.

RMA tire report through October (figures in thousands of units)

Passenger tires	YTD '88	YTD '87	% change
Shipments			
original equipment	45,043	44,969	0.2
radial	38,399	38,156	0.6
replacement	130,148	126,647	2.8
radial	121,796	113,650	7.2
export	7,930	4,814	64.7
radial	7,078	4,205	68.3
total	183,121	176,430	3.8
radial	167,273	156,011	7.2
Production	147,079	140,229	4.9
radial	133,952	123,409	8.5
Truck & bus tires			
Shipments			
original equipment	7,426	6,646	11.7
radial	5,503	4,621	19.1
replacement	28,252	28,835	-2.0
radial	16,605	15,666	6.0
export	2,753	1,686	63.3
radial	2,135	1,201	77.8
total	38,432	37,167	3.4
radial	24,243	21,489	12.8
Production	30,918	29,865	3.5
radial	19,107	16,925	12.9

LOOK AT IT AS JOB INSURANCE



The Rubber Division is dedicated to an idea: For polymer scientists, engineers and technicians, a career is a lifelong learning process.

And today in the broad field of rubber chemistry, the life of the technological information core upon which you base your career is estimated to be less than 5 years.

Where professional advancement is concerned, not to mention improved technical competence or even familiarization with techniques and terms for beginners, the value of the Rubber Division's extensive educational programs is inestimable. (In more than 20 years, some 15,000 people have taken the courses at all levels.)

Devised in cooperation with university professors, there are correspondence and classroom courses in Basic, Intermediate and Advanced Rubber Technology. Also provided are opportunities to attend frequent teaching symposia and workshops, and participants have unlimited access to technical papers.

For more information, write to: Education Committee, Rubber Division, ACS, The University of Akron, Akron, Ohio 44325 or call 216-375-7814 (Telex: 986434)

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